## **ABSTRACT**

The present invention relates to a sterile calcium-free bicarbonate-free dialysis concentrate composition for use in conjunction with regional citrate anti-coagulation in the context of either dialysis or hemofiltration. Methods of use of the sterile calcium free bicarbonate-free dialysis concentrate compositions are also disclosed. The bicarbonate-free concentrate takes into account the fact that citrate is hepatically metabolized into bicarbonate, thus minimizing metabolic complications.